

REPLACEMENT SHEET

Title: Three Dimensional Object and Method of Producing the Same
In Re Patent Application of Takashi Ito et al.
Appl. No. 10/561,673 Customer No. 570
Atty. Docket No.: 9369-113US (T37-196842C/NAO)

ABSTRACT

It is intended to provide an optical three-dimensional object as will be described below which has a high impact resistance and is superior in dimensional accuracy, mechanical properties such as tensile strength, and other properties such as water resistance, moisture resistance and heat resistance, and a method of producing the same. An optical three-dimensional object includes multiple cured resin layers containing at least one cured resin layer that has a sea-island microstructure in which fine island components of a polymer differing from a cured resin constituting the sea component and have a particle diameter of 20 to 2,000 nm are dispersed in the sea component made of the cured polymer; and a method of producing this optical three-dimensional object by stereolithographic molding method with the use of a photo curable resin composition containing a homogeneous mixture of a curable resin component for forming the sea component with a component (preferably a polyalkylene ether compound) for forming the polymeric island components.